

WHAT IS CLAIMED AS NEW AND DESIRED TO BE SECURED BY
LETTERS PATENT OF THE UNITED STATES IS:

1. A method for operating a flue gas purification plant (10) comprising a plurality of parallel absorber chambers (11), in which in each absorber chamber (11), CO and NO are simultaneously oxidized by means of a catalyst in a first absorber (15) according to the SCONOX principle and the resulting NO₂ is absorbed on the catalyst surface, in which SO₂ is furthermore oxidized by means of a catalyst in a second absorber (14) upstream of the first absorber (15) according to the SCOSOX principle and the resulting SO₃ is absorbed on the catalyst surface, in which method the absorber chambers (11) are successively regenerated by means of a regeneration gas containing hydrogen and/or hydrogen compounds in regularly repeating regeneration cycles affecting all the absorber chambers (11), characterized in that the regeneration time of the second absorber (14) within the regeneration cycle is respectively selected to be long enough to guarantee sufficient regeneration of the second absorber (14).
2. The method as claimed in claim 1, characterized in that each absorber chamber (11) is allocated a regeneration time within the regeneration cycle, in that for full regeneration of an absorber chamber (11) in the regeneration time the second absorber (14) is first regenerated in a first time segment and the first absorber (15) is regenerated in a subsequent second time segment, and in that the first time segment lasts at least about 5 minutes.
3. The method as claimed in claim 2, characterized in that the second time segment lasts at least about 3 minutes.
4. The method as claimed in claim 1, characterized in that the first and second absorbers (14, 15) are regenerated independently of one another.

5. The method as claimed in one of claims 1 to 4, characterized in that the first absorbers (15) of the absorber chambers (11) are regenerated in a first regeneration cycle, and the second absorbers (14) of
5 the absorber chambers (11) are regenerated in a second regeneration cycle, and in that the second regeneration cycle lasts substantially longer than the first regeneration cycle.

6. The method as claimed claim 5, characterized in
10 that only the second absorber (14) of an absorber chamber (11) is respectively regenerated in each first regeneration cycle.